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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/633,769	08/04/2003	Junichi Minamino	YAMAP0881US	6490	
43076	43076 7590 04/28/2006			EXAMINER	
	ARALINO (GENERAL	PATEL, GAUTAM			
RENNER, OTTO, BOISSELLE & SKLAR, LLP 1621 EUCLID AVENUE, NINETEENTH FLOOR			ART UNIT	PAPER NUMBER	
CLEVELANI	O, OH 44115-2191	2627			
			DATE MAILED: 04/28/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/633,769	MINAMINO ET AL.				
Office Action Summary	Examiner	Art Unit				
	Gautam R. Patel	2627				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from to cause the application to become ABANDONED	l. lely filed the mailing date of this communication. (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on						
	action is non-final.					
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-14</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-14</u> is/are rejected.						
7) Claim(s) is/are objected to.	7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)⊠ All b)□ Some * c)□ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 	Paper No(s)/Mail Da 5) Notice of Informal Pa	ate atent Application (PTO-152)				
Paper No(s)/Mail Date	6) Other:	,				

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DETAILED ACTION

1. Claims 1-14 are pending for the examination.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. § 119(a)-(d), which papers have been placed of record in the file.

NOTES/REMARKS

3. It not clear from the drawings or from specification how figure 6 and 7 are related what parts in figure 7 constitutes parts 102 105 and 127 in fig. 6. Figures 12 and 13 has the same problem.

Specification

4. The disclosure is objected for following reasons.

The title of the invention is neither precise nor descriptive. A new title is required which should include, using twenty words or fewer, claimed features that differentiate the invention from the Prior Art. It is recommended that the title should reflect the gist of or the improvement of the present invention.

Correction is required.

Claim Rejections - 35 U.S.C. § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

the claimed invention is directed to non-statutory subject matter.

Claim 8 does not define what is being claimed but simply states what a recording medium has. It is not even clear if claim pertains to an apparatus or a method as such.

When nonfunctional descriptive material is recorded on some computer-readable medium, in computer or an electromagnetic carrier signal, it is non statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material. I.e. abstract idea, stored in a computer-readable medium, in a computer or on an electromagnetic carrier signal does not make it statutory. See Diehr, 45 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in Benson were unpatentable as

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abstract idea because {[t]he sole particle application of the algorithm was in connection with programming of a general purpose computer.").

Claim Rejections - 35 U.S.C. § 112

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6. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8 and 14 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8, lines 1-5 are confusing and unclear. It is not clear at all what is being claimed here. Claim in neither an apparatus nor a method, it simply states medium having some data on it. All mediums inherently has some data on it.

As to claim 14 it is not clear at all if it a an apparatus claim or a method claim. Claim does not clearly set forth the metes and bounds of the patent protection desired.

Claim Rejections - 35 U.S.C. § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 and 9-13 are rejected under 35 U.S.C. § 102(b) as being anticipated by Tanoue et al., US. patent 6,128,260 (hereafter Tanoue).

As to claim 1, Tanoue discloses the invention as claimed [see Figs. 1, 6-7] including a data modulation section, a parameter value changing section and a recording section, comprising:

a data modulation section [fig.6, unit 14] for modulating data in accordance with a prescribed modulation rule [col. 11, lines 24-60];

a parameter value changing section [fig. 6, unit 38] for changing at least one parameter value of the prescribed modulation rule [col. 13, lines 19-29 7 col. 15, lines 8-38]; and

a recording section [fig. 6, unit 5] for recording the data modulated in accordance with the prescribed modulation rule on the recording medium [col. 11, lies 26-60].

8. The aforementioned claim 2, recites the following elements, inter alia, disclosed in

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Tanoue:

the prescribed modulation rule is a state-type modulation rule, and the at least one parameter value is an initial value of a state [col. 11, lies 26-60 & col. 15, lines 8-38].

9. The aforementioned claim 3, recites the following elements, inter alia, disclosed in

Tanoue:

the prescribed modulation rule uses a digital sum value, and the at least one parameter value is an initial value of the digital sum value [col. 6, lines 21-31].

10. The aforementioned claim 4, recites the following elements, inter alia, disclosed in

Tanoue:

the parameter value changing section changes the at least one parameter value randomly col. 15, lines 8-38].

11. The aforementioned claim 5, recites the following elements, inter alia, disclosed in

Tanoue:

the parameter value changing section changes the at least one parameter value in a prescribed order [col. 15, lines 8-38].

NOTE: moment parameter is in a prescribed order.

12. The aforementioned claim 6, recites the following elements, inter alia, disclosed in

Tanoue:

comprising a storage section [fig. 6, unit2 and unit 38] for storing a previously used parameter value, wherein the parameter value changing section randomly selects a parameter value to be set from parameter values which are different from the previously used parameter value [col. 11, lines 24-60 & col. 13, lines 30-52];

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13. As to claim 7, it is a method claim corresponding to an apparatus claim 1 and it is therefore rejected for the similar reasons set forth in the rejection of claim 1, above.

14. The aforementioned claim 9, recites the following elements, inter alia, disclosed in Tanoue:

a parameter value changing section [fig. 6, unit 38] for changing a parameter value representing a target value of an offset amount of a data recording position from a prescribed reference position [col. 13, lines 19-29 7 col. 15, lines 8-38];

an offset amount changing section [gap field control] for changing the offset amount of the data recording position from the prescribed reference position such that as data recording proceeds, the offset amount of the data recording position from the prescribed reference position approaches the target value [col. 4, lines 41-64 & col. 11, lines 24-60]; and

a recording section [fig. 6, unit 5] for recording the data on the recording medium at the data recording position [col. 11, lies 26-60].

- 15. As to claims 10-12, they are system claims corresponding to claims 4-6 respectively and they are therefore rejected for the similar reasons set forth in the rejection of claims 4-6 respectively, <u>above</u>.
- 16. As to claim 13, it is drawn to a method corresponding to the apparatus of claim 9, and is therefore rejected for similar reasons set forth in the rejection of claim 9, above.
- 17. A search based on the best understanding of the claims has been made to find the most pertinent art, but no statement about invention will be appropriate at this time regarding the allowableness of claims 8 and 14 and no art rejection will be made in this office action regarding the claims 8 & 14, due to the speculation required to interpret the claims because of their indefiniteness under 35 U.S.C. 112, 1st and 2nd paragraphs as noted above (see In re Steele, 134 USPQ 292).

Other prior art cited

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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a) Arts (US. Patent 6084536).

b) Knado et al. (US. patent 6650607).

c) Lokhoff et al. (US. patent 5,117,313)

Contact information

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is 571-272-7625. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2650) where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Dwayne Bost, who can be reached on (571) 272-7023.

Any inquiry of a general nature or relating to the status of this application should be directed to the Electronic Business Center whose telephone number is 866-217-9197 or the USPTO contact Center telephone number is (800) PTO-9199.

GAUTAM R. PATEL

Gautam R. Patel Primary Examiner Group Art Unit 2627

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April 25, 2006